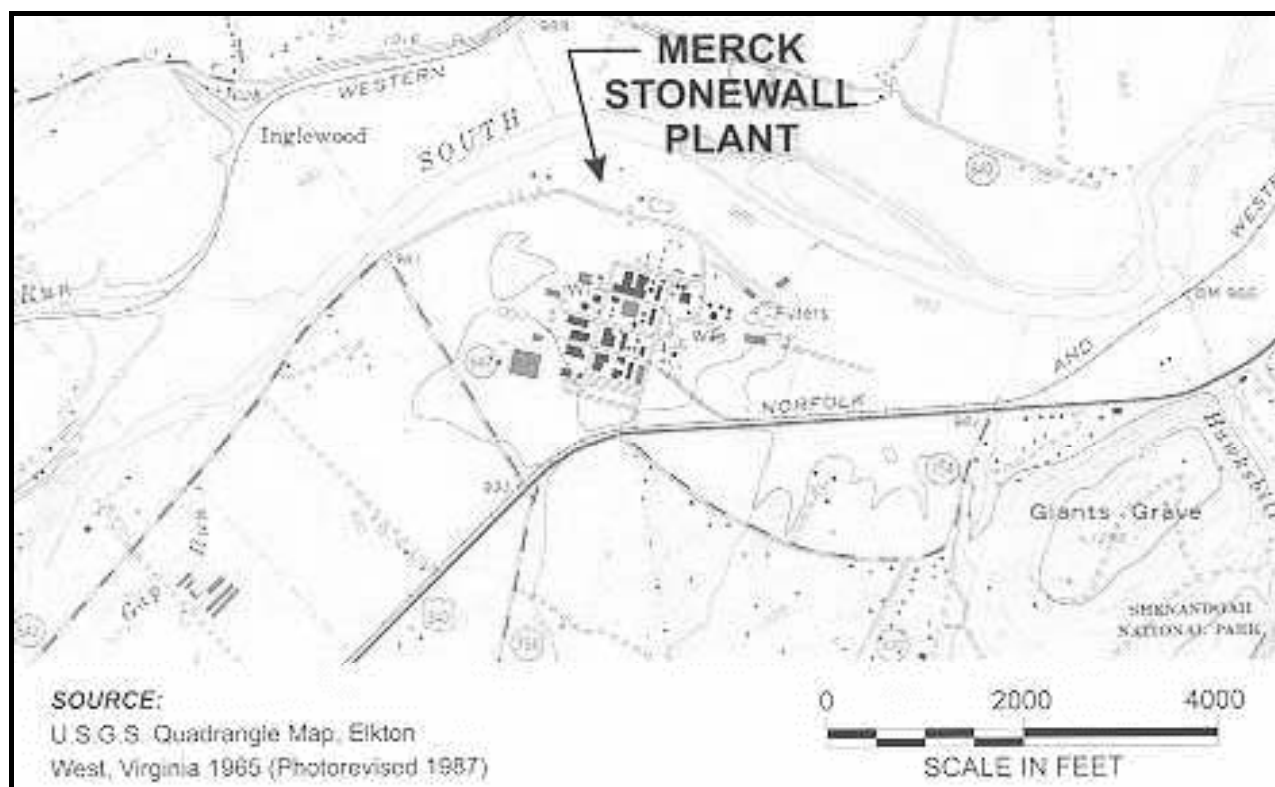


## **Region 3 GPRA Baseline RCRA Corrective Action Facility**

# **Merck and Company, Inc.**

Highway 340 South  
Elkton, VA 22827  
Congressional District 6  
EPA ID #: VAD001705110  
Last Updated: January 1, 2004



## **Current RCRA CA Activities**

A revised Corrective Measures Implementation (CMI) Workplan and related documents were submitted June 18, 2003 in response to the Virginia Department of Environmental Quality's (DEQ) March 19, 2003 comments. The DEQ will review the revised CMI Workplan and provide comments to the facility. On December 4, 2003, Merck submitted a revised, draft Sampling Analysis Plan (SAP) and Groundwater Monitoring Plan (GMP) for the landfill. The DEQ will review the revised SAP and GMP and provide comments to the facility. In addition, the DEQ and Merck are in the process of establishing groundwater protection standards (GPSs) for several additional constituents.

Merck has exceeded the GPSs for several constituents at the landfill and has, therefore, begun implementation of the Corrective Action program pursuant to the Virginia Solid Waste

Management Regulations (VSWMR) as well. On July 29, 2003, Merck petitioned for a variance from certain provisions of the Virginia Solid Waste Management Regulations (as made applicable by the existing RCRA Hazardous Waste Permit) that overlap RCRA Corrective Action requirements. As a result of the August 7, 2003 meeting, the facility withdrew the variance petition in the September 19, 2003 letter. Subsequently, the DEQ advised Merck in a November 6, 2003 letter that the RCRA Corrective Action and VSWMR Corrective Action programs at the landfill will be dovetailed together using the CMI Workplan to fulfill the requirements of both programs.

The landfill was capped in 2000, and semiannual sampling and analysis of the surrounding groundwater wells is being conducted. Pilot testing has already begun for the bioventing and biosparging remedies at other areas of concern (AOCs). Data developed from the pilot testing will be used for full-scale implementation of these remedies.

## **Site Description**

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Merck is located in northwestern Virginia, approximately 2 miles southwest of Elkton. The plant lies in the Shenandoah Valley, just SE of the South Fork of the Shenandoah River. The facility occupies approximately 1,300 acres, however, active operations occur on only 89 acres.

The Facility began operation in 1941. Prior to that, the land was undeveloped. The facility includes a pharmaceutical laboratory and manufacturing facilities, which produce animal and human health care products. The plant is supported by a wastewater treatment plant, a solvent recovery operation and a powerplant with co-generation facilities. Additionally there is an onsite, permitted, industrial landfill. The landfill occupies 7 acres located in the northeastern corner of the property. Prior to 1980, various production wastes, including organic and inorganic chemicals from the Plant operations were disposed of in the landfill. Merck property borders the landfill on all sides. The landfill was capped in 2000 as one of the corrective measures to be implemented.

The current RCRA permit became effective on April 5, 2002 and shall remain in effect until March 6, 2012. The facility is permitted to store hazardous wastes in containers. The Corrective Measures Study report was approved by EPA on May 7, 1999. The facility is currently in the Corrective Measures Implementation (CMI) phase of RCRA Corrective Action.

## **RCRA CA Milestones**

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In October 1989, EPA issued a RCRA Administrative Order to Merck. EPA issued the Statement of Basis on July 2, 1999. A public meeting was held in September 1999. The Final Decision and Response to Comments (FDRTC) was issued in March 2001. The DEQ has incorporated the requirements of the FDRTC and the previously issued Solid Waste Management Permit into the facility's RCRA operating permit. The final RCRA permit became effective on April 5, 2002 and shall remain in effect until March 6, 2012.

The Corrective Measures Study report was approved by EPA on May 7, 1999. The facility is currently in the Corrective Measures Implementation (CMI) phase of RCRA Corrective Action. The facility submitted a revised CMI Work Plan June 18, 2003.

## **Environmental Indicator Status**

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Under the Government Performance and Results Act (GPRA), EPA has set national goals to address high priority RCRA Corrective Action facilities by the year 2005. EPA is evaluating two key indicators for each facility: Current Human Exposures Under Control and Migration of Contaminated Groundwater Under Control. This facility is one of EPA Region III's high priority facilities and falls under this initiative. As of September 29, 2003, the current evaluation of Environmental Indicators for this facility is as follows:

- *Human Exposures Controlled Determination:* IN: Additional information is needed to determine if Human Exposures are Controlled. Please refer to form CA725 dated September 29, 2003 for more details.
- *Release to Groundwater Controlled Determination:* IN: Additional information is needed to determine if Human Exposures are Controlled. Please refer to form CA750 dated September 29, 2003 for more details.

## Contaminants

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The primary contaminants of concern in the groundwater include benzene, chlorobenzene, chloroform, methylene chloride, naphthalene, trichloroethene, vinyl chloride, and vanadium. The contaminants of concern in surface and subsurface soils include several VOCs and SVOCs..

## Community Involvement

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Citizens questions and concerns have been addressed throughout the RCRA Corrective Action process. A Community Relations Plan is currently being developed in conjunction with the CMI Workplan. Additionally, the Administrative Record had been made available at the repository listed below to give the community immediate access to the RFI Report and the CMS Report. The Administrative Record containing relevant information is available for public review at the following location(s):

Massanutten Regional Library  
174 South Main Street  
Harrisonburg, VA 22801  
Phone: (540) 434-4475

The Administrative Record may be accessed during normal library hours, 9am-9pm Monday-Thursday, 9am-6pm Friday, and 9am-5pm Saturday. Additional information concerning the library may be found at the website <http://www.mrlib.org/mainlibrary.htm>.

## Government Contacts

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The Commonwealth of Virginia has the lead authority for this project. Please contact the state project manager listed below for details on this project or the contents of this fact sheet.

DEQ Project Manager:

Garwin W. Eng  
Virginia Department of Environmental Quality  
P.O. Box 10009  
Richmond, VA 23240-0009  
Phone: (804) 698-4131  
Email: [gweng@deq.state.va.us](mailto:gweng@deq.state.va.us)

EPA Project Manager  
Ms. Estena McGhee - 3WC23  
U.S. Environmental Protection Agency - Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029  
Phone: (215) 814-3433  
Email: [mcghee.estena@epa.gov](mailto:mcghee.estena@epa.gov)

For more information about EPA's corrective action program, including Environmental Indicators, please visit EPA's web site at: [www.epa.gov/reg3wcmd/correctiveaction.htm](http://www.epa.gov/reg3wcmd/correctiveaction.htm)

## Facility Contact

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The facility contact as listed in the RCRA permit is:

Dr. Helen L. Penrod  
Project Coordinator Merck & Co., Inc.  
Stonewall Plant  
P.O. Box 7  
Elkton, VA 22827  
Phone: (540) 298-5487

## Factsheet Updates

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The previous factsheet was updated July 1, 2003. The next update is scheduled for July 1, 2004. Previous factsheets may be obtained through the listed contacts.